**CONTEMPORARY ISSUES-BASED CASE STUDY – STSE ASSIGNMENT**

**Ethical/Social Issues in Genetics**

**Introduction:**

**Science is a constantly evolving discipline with new research being published daily. Scientific discoveries and new technologies emerge from this research. However, it is also important to consider the impact of these scientific advents on society and the environment. This is where ethical/social issues and controversies arise.**

Big Idea:

**Genetic and genomic research can have social and environmental implications.**

**Learning Goals:**

* **To describe in detail the cellular and/or genetic processes involved in the issue of choice.**
* **To explain the controversial nature of the issue – arguments “for” and “against”.**
* **To explore the social implications of the issue, including benefits, negatives and further questions for inquiry.**
* **To understand the role of government legislature and control in Canada AND other countries.**
* **To formulate an informed opinion and defend one’s stance based on researched facts.**

**To Do:**

* **Choose ONE ethical/social issue in genetics from the following list:**
* Genetic Testing and discrimination (ie. work and insurance coverage) with respect to disorders (e.g. Huntington’s) – who should have access to our personal genetic information and decide how it’s used
* Stem-Cell Research
* Gene Therapy (eg. cystic fibrosis)
* In-Vitro Fertilization
* Cloning – organisms
* Cloning - organs
* “Designer” Babies
* Genetically Modified Organisms
* Egg donation (including black market egg donation)
* Personal genetic profiling
* *Topic of your choice (MUST be approved by the teacher)*
* **Research your issue using the following questions:**

1. An explanation of the issue at the cellular/DNA level.
2. What are the possible social benefits of the issue?
3. What ethical questions does this issue raise?
4. Why is the issue controversial?
5. What is the current accepted practice regarding this issue in Canada?
6. How does Canada’s stance on the issue compare to the international community?

Note: ALL of these questions must be answered in your final assignment

* **Reference all of your sources (minimum of 5, with at least one media source [TV program, radio, blog, newspaper article, etc.]). Please, use APA style.**
* **\*\*Formulate your own informed opinion on your chosen issue. Where do you stand? You MUST use your research to back up your stance.\*\***
* **Organize your answers to guiding questions AND your informed opinion/stance in one of the following formats: essay (2-3 pages), PowerPoint presentation, information poster (at least Bristol board size) or *an alternative format (MUST be approved by the teacher).***

**Assignment Schedule:**

1. **I will declare my topic of choice on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
2. **My in-class period(s) for research is/are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
3. **I will have my research completed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
4. **I will have a rough draft of my assignment completed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. I will bring it to class for peer review.**
5. **I will submit the final draft of my assignment on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

***Disclaimer:***

***I have read and understand ALL of the assignment expectations as described above. I agree to complete this assignment on my own and to the best of my abilities (i.e. no plagiarism). I will inform my teacher if there are any modifications and accommodations that need to be made in order for me to complete this assignment on time.***

***Please, sign and date here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***